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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/354,500	07/16/1999	MACK J. SCHERMER	GSIL-0109-PU	5234
22045	7590	10/31/2005	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			ALLEN, MARIANNE P	
			ART UNIT	PAPER NUMBER
			1647	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/354,500

Applicant(s)

SCHERMER ET AL.

Examiner

Marianne P. Allen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Applicant's arguments filed 8/4/05 have been fully considered but they are not fully persuasive. The rejection of claims 1-18 under 35 U.S.C. 103(a) as being unpatentable over Trulson et al. (U.S. Patent No. 5,578,832) or Brown et al. (U.S. Patent No. 5,807,522) in view of Ginestet (U.S. Patent No. 6,225,636) will be withdrawn in view of applicant's arguments that the references do not disclose nor fairly suggest using three or more calibration dye spots each of the calibration dye spots comprising a single pure dye.

This Office action is being made non-final as the prior Office incorrectly listed claims 10-20 as pending and the grounds of rejection listed the incorrect claim numbers. The claims pending are 1-18.

Claim Rejections - 35 USC § 112

Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for automatically creating crosstalk-corrected data of a microarray using the exemplified matrix algebra, does not reasonably provide enablement for computing a set of correction factors and applying the set of correction factor to quantitation data obtained from the generated microarray images in any other way. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

This rejection is maintained for reasons of record. The prior Office action inadvertently recited the wrong claim numbers. Applicant's arguments are with respect to the exemplified matrix algebra that the ground of rejection indicates is enabled. Note that the equations and matrix algebra discussed in the response are not limitations of the claims. Applicant has not

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argued nor supplied evidence that any other methods or algorithms for computing the set of correction factors from the output measurements and for applying the set of correction factors to quantitation data obtained from the generated microarray images are disclosed or would have been known at the time of the invention. The specification does not point to any other methods nor provide guidance for developing any other techniques for computing these factors. As such, breadth of the claims is not enabled.

Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection is maintained for reasons of record. The prior Office action inadvertently recited the wrong claim numbers.

Applicant was requested to clarify whether they intended to invoke 35 USC 112, sixth paragraph, and if so to point to the equivalents in the specification, or to point to the part of the specification that particularly points out the metes and bounds of the recited means-plus-function elements. They have not done so. Applicant is directed to MPEP 2181-2186 with respect to means-plus-function language.

The record does not clearly reflect whether 35 USC 112, sixth paragraph, was intended to be invoked or not. Failure to make this clear in the next response will be considered non-responsive.

Claim 10 recites “means for measuring an output of each of the output channels,” “means for computing a set of correction factors,” and “means for applying the set of correction factors to quantitation data.”

Applicant argues that a means for measuring an output of each of the output channels is a microarray reader described with reference to Figure 1 and page 6. Figure 1 does not depict a microarray reader. It is a top plan schematic view of an array. Applicant has not pointed to any disclosure in the specification that limits this means to a microarray reader nor any equivalents thereof.

Applicant argues that a means for computing a set of correction factors and means for applying the set of correction factors to quantitation data is the sub-system described with reference to Figure 7. Figure 7 does not disclose a sub-system. It is a schematic diagram of a preferred hardware configuration that appears to include a mouse, keyboard, monitor, and CPU with disk drives. Applicant has not pointed to any disclosure in the specification that details the sub-system outlined in the response nor any equivalents.

The claims do not make clear what hardware and/or software components are required by the claimed system.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 571-272-0712. The examiner can normally be reached on Monday-Thursday, 5:30 am - 1:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marianne P. Allen
Primary Examiner
Art Unit 1647
10/28/05

mpa